EHQMS Procedure
Aspect Identification & Assessment
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2. Air emissions to atmosphere;
3. Water usage and discharges to surface water groundwater and sewers;
4. Land contamination caused by spillages, etc.;
5. The production, re-use, recycling and disposal of controlled and special wastes;
6. The storage and management of materials;
7. Activities upon local ecology of operations, sites and premises;
8. Environmental noise;
9. Energy use and management;
10. Use of transport and vehicles;
11. Legal issues and other requirements;
12. Raw materials and packaging;
13. Office activities;
14. Landscaping and infrastructure;
15. Other relevant issues such as odors, particulates, lighting & pests.

When identifying inputs and outputs, the QEHS Manager considers all modes of operation since start-up, shutdown, or emergency operations might introduce additional environmental aspects and impacts into our processes.

1.3.2 Impact Assessment

Once the impacts have been identified they are prioritised in terms of their environmental impact to assist in using them for setting objectives and targets and for identifying operational control procedures. Each aspect identified is assigned a significance rating to indicate the relative importance of its related environmental impact. The significance rating is used to define those impacts which are to be controlled through environmental objectives and targets, or by the implementation of operational control procedures.

The assessment of the severity of an environmental impact drives management attention and supports planning for mitigation. A qualitative risk assessment scheme consisting of qualitative probability and impact scales is undertaken to ensure detailed understanding of the effects of each impact. The QEHS Manager will engage with Process Owners to:

1. Identify the control measures already applied to each significant impact i.e. existing control measures. These may be pro-active (reducing the probability) or reactive (reducing the impact);
2. Rank the probability of each impact occurring, after taking into account the actual effectiveness of the existing control measures;
3. Enter the existing control measures and the associated current impact scores;
4. Undertake a risk assessment to provide more detailed understanding of the impact’s consequences;
5. Set objectives and targets for achieving impact mitigation.

Using the ‘significance determination’ section of the portion of the Aspect Identification Register the QEHS Manager will evaluate each identified aspect to determine whether it is significant. The environmental aspects will be considered to be significant if the aspect has an impact on the environment and meets the impact significance scoring criteria for implementing mitigation, See table S1 below.

Forecast probability, cost and time data is assessed for each impact based on the causes and effects described, taking into account the existing controls and active responses.
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1. All aspects which elicit concerns of stakeholders, interested parties and our organization are regarded as significant, if necessary controls have not been implemented;
2. All aspects which are subject to environmental legislation are regarded as significant, and therefore noted as having a high impact/risk, if there is a breach or potential breach of legislation;
3. All aspects where insufficient information is available to make a reasoned judgement are regarded as significant until further information is available.

1.3.3 Significance Rating

An inherent impact significance rating represents the level of risk in the absence of a controlled environment and is arrived at after entering the scores into the Aspect Identification Register. For each impact that is identified, an evaluation is undertaken to assign a specific score in order to determine the correct level of action.

Impact significance (Table S1) is calculated by adding the impact, legal and quantity criteria, multiplied by the frequency. The resulting significance score (Table S2) is then used to prioritise the appropriate level of action. Any significance criteria scoring 4 are automatically highlighted red and should themselves be considered significant and subject to treatment.

### Impact Significance (S1)

<table>
<thead>
<tr>
<th>Significance of Impact (S)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Impact</td>
<td>Very low</td>
<td>Low</td>
<td>Average</td>
<td>Great</td>
</tr>
<tr>
<td>B. Legal requirement</td>
<td>No regulations</td>
<td>Guidelines &amp; ACoPs</td>
<td>Standards</td>
<td>Laws &amp; Regulations</td>
</tr>
<tr>
<td>C. Quantity</td>
<td>Low</td>
<td>Average</td>
<td>Large</td>
<td>Significant</td>
</tr>
<tr>
<td>D. Frequency</td>
<td>Almost never</td>
<td>Rare</td>
<td>Often</td>
<td>Always</td>
</tr>
</tbody>
</table>

### Significance Score (S2)

<table>
<thead>
<tr>
<th>Score</th>
<th>Exposure</th>
<th>Impact Exposure</th>
<th>Management Control Action (MCA)</th>
<th>Timeframe for MCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 7</td>
<td>Low</td>
<td>Activities in this category present minor levels of impact and/or risk. The application of mitigation strategies to reduce the impact is advised. Consider ways of modifying the process or implementing controls to reduce the impacts and risks to as low as reasonably practicable (ALARP).</td>
<td>1 year +</td>
<td></td>
</tr>
<tr>
<td>8 to 13</td>
<td>Medium</td>
<td>Activities in this category present serious and unacceptable levels of impact and/or risk. Consider ways of modifying the process and implementing controls to reduce the impacts and risks to as low as reasonably practicable (ALARP). Additional control measures and monitoring may be required.</td>
<td>Within 6 months</td>
<td></td>
</tr>
<tr>
<td>14 to 19</td>
<td>High</td>
<td>Activities in this category present high levels of impact or risk and should not be allowed to proceed without very careful planning. Consider consulting specialists. The company should evaluate whether the activity is actually necessary in the first place or whether alternative processes are available.</td>
<td>Within 3 months</td>
<td></td>
</tr>
<tr>
<td>20 to 24</td>
<td>Very High</td>
<td>Activities in this category present extreme levels of impact and/or risk, such as loss of life or breach of legislation and must not be undertaken.</td>
<td>Immediate</td>
<td></td>
</tr>
</tbody>
</table>